

Title (en)

Rapid prototyping and manufacturing system and method

Title (de)

Herstellungssystem und Verfahren zum schnellen Herstellen von Prototypen

Title (fr)

Système de fabrication et procédé de prototypage rapide

Publication

EP 1769901 A2 20070404 (EN)

Application

EP 06018204 A 20060831

Priority

US 24082105 A 20050930

Abstract (en)

A stereolithography apparatus having a resin vat with resupply containers in one-way flow communication and a leveling container in two-way flow communication, an automatic offload cart to remove and replace build support platforms, an elevator assembly for supporting and releasably retaining a build platform removably attached to the stereolithography apparatus frame such that elevator forks supporting the build platform can be released into the vat and removed from the stereolithography apparatus with the vat, and a recoater assembly and recoater blade for mapping the resin surface in the vat and applying a fresh coating of resin to a cross-section being built in the vat.

IPC 8 full level

B29C 67/00 (2006.01)

CPC (source: EP US)

B29C 64/135 (2017.07 - EP US); **B29C 64/182** (2017.07 - EP); **B33Y 10/00** (2014.12 - EP US); **B33Y 30/00** (2014.12 - EP US); **B33Y 40/00** (2014.12 - EP US); **B29C 64/124** (2017.07 - EP US); **B33Y 50/02** (2014.12 - US)

Cited by

CN108582772A; EP4275869A1; US10011469B2; US11760004B2; WO2022235549A1; EP3225383B1

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Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1769901 A2 20070404; **EP 1769901 A3 20131204**; **EP 1769901 B1 20161207**; CN 1939706 A 20070404; JP 2007098947 A 20070419; JP 4999059 B2 20120815; US 2007075460 A1 20070405; US 7520740 B2 20090421

DOCDB simple family (application)

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